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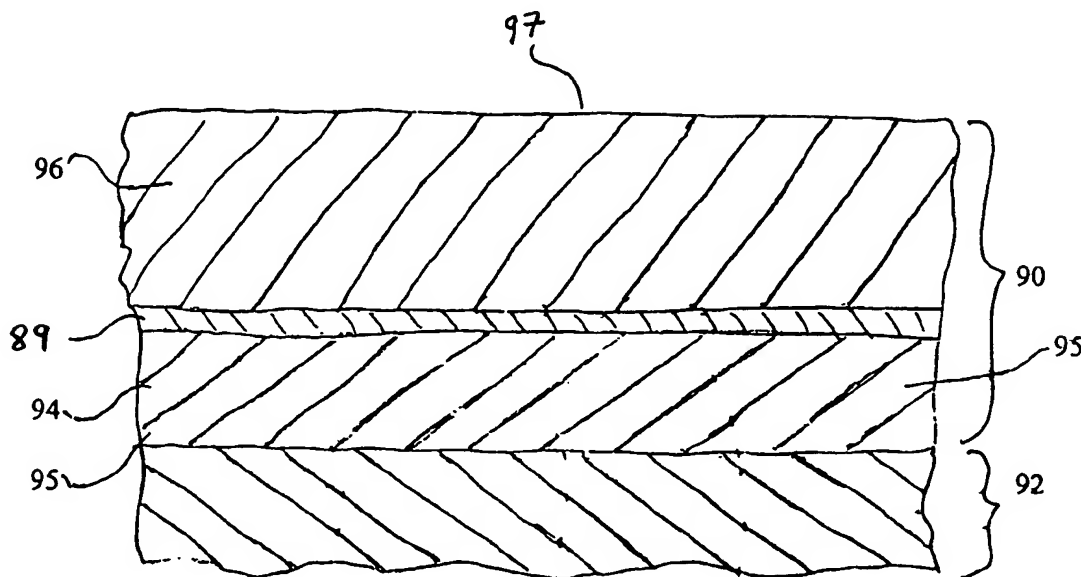
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(54) Title: **BOND COAT FOR A THERMAL BARRIER COATING SYSTEM AND RELATED METHOD THEREOF**



(57) Abstract: Method and Apparatus for efficiently applying a bond coat and related coating systems to a surface that can survive the thermal gradient that is encountered in very high temperature, high heat flux environments such as a rocket engine. An apparatus for efficiently applying coating systems using a vapor or cluster deposition technique such as a directed vapor deposition (DVD) approach, and more particularly providing a thermal barrier coating (TBC) system applications with very high temperature utility in either oxidizing or non-oxidizing conditions.

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